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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/435,789	11/08/1999	GORDON JAMES SMITH	RO999-123(IB	5685

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04/07/2004

IBM Corporation
Department 917
3605 Highway 52 North
Rochester, MN 55901-7829

EXAMINER

MOISE, EMMANUEL LIONEL

ART UNIT	PAPER NUMBER
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2136

DATE MAILED: 04/07/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary

Application No.

09/435,789

Applicant(s)

SMITH, GORDON JAMES

Examiner

Emmanuel L. Moise

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 January 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9, 11-19 and 24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6, 11-16 and 24 is/are rejected.
- 7) ☒ Claim(s) 7-9 and 17-19 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 2.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

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DETAILED ACTION

1. Claims 1-9, 11-19, and 24 are presented for examination. Claims 10 and 20-23 have been canceled.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1, 3, 6, 11, 16, and 24 are rejected under 35 U.S.C. 102(b) as being anticipated by Lee et al. (US patent No. 5,245,661, hereinafter "Lee").

As per claim 1, Lee teaches a method of electronic watermarking comprising; sampling input signals using an uneven sampling rate (column 3, lines 41-47).

As per claim 3, the sampling in Lee also comprises sampling using a pseudo-random sampling rate (column 3, lines 29-31).

As per claim 6, Lee teaches the claimed method of authentication of candidate data comprising: sampling original signals using an uneven sampling rate to produce unevenly sampled original signal data (column 3, lines 41-47); and comparing the unevenly sampled original data with the candidate data for a degree of match (column 4, lines 4-11).

As per claim 11, Lee teaches the claimed apparatus for electronic watermarking, comprising: input means for receiving input signals (column 3, lines 27-28); and sampling means for sampling the input signal using an uneven sampling rate (column 3, lines 41-47).

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As per claim 16, Lee teaches the claimed apparatus for authentication of candidate data comprising: sampling means for sampling original signals using an uneven sampling rate to produce unevenly sampled original signal data (column 3, lines 41-47); and comparing means for comparing the unevenly sampled original data with the candidate data for a degree of match (column 4, lines 4-11).

As per claim 24, Lee teaches the claimed data processing system comprising: means for implementing a data watermarking processing, and means for implementing a data watermark authentication processing (column 3, line 27 – column 4, line 11).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 2, 4, 5, and 12-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lee (U.S. Patent No. 5,687,236).

As per claims 2 and 4, Lee does not explicitly disclose that the sampling comprises sampling at a rate such that an average sampling frequency is greater than or equal to twice the highest frequency in the input signals. However, making the average sampling frequency greater than or equal to twice the highest frequency in the input signals would have been obvious to a person of ordinary skill in the art to achieve a desired purpose. Claim 4 is rejected under the same rationale.

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As per claims 5 and 12, Lee does not explicitly disclose that the input signals are analog and that an analog-to-digital converter is used. However, if the input signals to the distributed sample scrambling system of Lee were analog, it would have been obvious to a person of ordinary skill in the art to utilize an analog-to-digital converter to digitize the input signals for further processing. The motivation would have been to provide a more versatile distributed sample scrambling system.

As per claim 13, the sampling in Lee also comprises sampling using a pseudo-random sampling rate (column 3, lines 29-31).

As per claims 14 and 15, Lee does not explicitly disclose that the analog-to-digital converter samples the input signals at a rate such that an average sampling frequency is greater than or equal to twice the highest frequency in the input signals. However, as aforementioned in the rejection of claim 2, making the average sampling frequency greater than or equal to twice the highest frequency in the input signals would have been obvious to a person of ordinary skill in the art to achieve a desired purpose. Claim 15 is rejected under the same rationale.

Allowable Subject Matter

6. Claims 7-9 and 17-19 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.


U.S. Patent No. 5,687,236 (Moskowitz et al.)

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Emmanuel L. Moise whose telephone number is (703)305-9763. The examiner can normally be reached on M-F (9:30-6:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz R. Sheikh can be reached on (703)305-9648. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Emmanuel L. Moise
Primary Examiner
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